

WHAT IS CLAIMED IS:

1. A three-terminal filter using the area flexural vibration mode comprising:
 - at least three electrodes having a substantially square shape; and
 - at least two piezoelectric layers having a substantially square shape;wherein
 - said at least three electrodes and said at least two piezoelectric layers are alternately laminated;
 - said at least two piezoelectric layers are polarized in a thickness direction; and
 - said at least three electrodes include a first surface electrode located at a first surface of said filter that functions as an input electrode, a second surface electrode located at a second surface of said filter that functions as an output electrode, and an internal electrode located between said at least two piezoelectric layers that functions as a ground electrode.
2. The three-terminal filter according to claim 1, wherein said at least two piezoelectric layers are polarized in the same direction.
3. The three-terminal filter according to claim 1, wherein one of said at least two piezoelectric layers is polarized in a first direction, and another of said at least two piezoelectric layers is polarized in a direction opposite to the first direction.
4. The three-terminal filter according to claim 1, wherein one of said at least two piezoelectric layers is polarized in a direction extending from said first surface towards said internal electrode, and another of said at least two piezoelectric layers is polarized in a direction extending from said second surface towards said internal electrode.

5. The three-terminal filter according to claim 1, wherein one of said at least two piezoelectric layers is polarized in a direction extending from said internal electrode toward said first surface, and another of said at least two piezoelectric layers is polarized in a direction extending from said internal electrode toward said second surface.
6. A three-terminal filter comprising:
- at least three electrodes; and
 - at least two piezoelectric layers; wherein
 - said at least three electrodes and said at least two piezoelectric layers are alternately laminated;
 - said at least two piezoelectric layers are polarized in a thickness direction;
 - and
 - said at least three electrodes and said at least two piezoelectric layers are configured to vibrate in an area flexural mode.
7. The three-terminal filter according to claim 6, wherein said at least three electrodes have a substantially square shape.
8. The three-terminal filter according to claim 6, wherein said at least two piezoelectric layers have a substantially square shape.
9. The three-terminal filter according to claim 6, wherein said at least three electrodes include a first surface electrode located at a first surface of said filter that functions as an input electrode, a second surface electrode located at a second surface of said filter that functions as an output electrode, and an internal electrode located between said at least two piezoelectric layers that functions as a ground electrode.
10. The three-terminal filter according to claim 6, wherein said at least two piezoelectric layers are polarized in the same direction.

11. The three-terminal filter according to claim 6, wherein one of said at least two piezoelectric layers is polarized in a first direction, and another of said at least two piezoelectric layers is polarized in a direction opposite to the first direction.
12. The three-terminal filter according to claim 6, wherein one of said at least two piezoelectric layers is polarized in a direction extending from said first surface towards said internal electrode, and another of said at least two piezoelectric layers is polarized in a direction extending from said second surface towards said internal electrode.
13. The three-terminal filter according to claim 6, wherein one of said at least two piezoelectric layers is polarized in a direction extending from said internal electrode toward said first surface, and another of said at least two piezoelectric layers is polarized in a direction extending from said internal electrode toward said second surface.
14. A filter comprising:
- a plurality of electrodes; and
 - a plurality of piezoelectric layers; wherein
 - said plurality of electrodes and said plurality of piezoelectric layers are alternately laminated;
 - said plurality of piezoelectric layers are polarized in a thickness direction;
- and
- said plurality of electrodes and said plurality of piezoelectric layers are configured to vibrate in an area flexural mode.
15. The filter according to claim 14, wherein the filter comprises a three-terminal filter.